



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/629,653	08/01/2000	Nicolas Vazquez	5150-45000	7618
35690	7590	01/04/2005	EXAMINER	
MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C. P.O. BOX 398 AUSTIN, TX 78767-0398			KISS, ERIC B	
			ART UNIT	PAPER NUMBER
			2122	

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/629,653	VAZQUEZ ET AL.	
	Examiner	Art Unit	
	Eric B. Kiss	2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 November 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 27-30,32,33 and 36-59 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 47-59 is/are allowed.
 6) Claim(s) 27-30,32,33,36,37 and 41-46 is/are rejected.
 7) Claim(s) 38-40 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 23 November 2004 has been entered.

Claims 27-30, 32, 33, 36-59 are pending.

Response to Arguments

2. Applicant's arguments, see p. 12, line 9, through p. 14, line 7, filed 23 November 2004, with respect to the rejections of claims 47-59 have been fully considered and are persuasive. The rejections of claims 47-59 have been withdrawn.

3. Applicant's arguments, see p. 14, line 12, through p. 16, line 4, filed 23 November 2004, with respect to the rejections of claims 27-30, 32, 33, and 36-46 have been fully considered but they are not persuasive.

a. In response to Applicant's arguments on p. 14, line 12, through p. 15, line 14, the Examiner maintains that *Blowers et al.* discloses measuring an amount of time that elapses during execution of the image processing algorithm for each of a plurality of image processing categories (see, for example, Fig. 9, along with the description of "TimeTaken" in the table of

column 13; the tasks of Blowers et al. include such categories as acquisition, control-flow, and image data manipulation); and displaying information indicating the amount of time that elapses during said executing the image processing algorithm for each of the plurality of image processing categories (see “Time Taken” for various categories illustrated in Fig. 9).

Blowers et al. fail to expressly disclose determining average amounts of time. However, teachings of Pizano et al. remedy this deficiency, as discussed in the rejections below.

- b. In response to Applicant’s arguments on p. 15, lines 15-23, (with respect to claims 27 and 41), as stated in the Office action mailed November 13, 2003,

The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). The rejection in question relies upon the teachings of Pizano et al. to show that it has been known and shown to be desirable to determine an average amount of time required to execute an image processing algorithm in order to provide benchmark data for the algorithm.

Further, the Examiner maintains that measuring and displaying information indicating an amount of time that elapses during execution of an image processing algorithm is disclosed by Blowers et al. (see, for example, Fig. 9, along with the description of “TimeTaken” in the table of column 13). Therefore, the Examiner does not rely upon Pizano et al. to teach displaying time information as this is already disclosed by Blowers et al.

- c. In response to Applicant’s arguments on p. 15, line 24, through p. 16, line 1, the Examiner maintains that Blowers et al. discloses such a graphical data flow diagram that

implements the image processing algorithm (see, for example, Fig. 6 and column 8, lines 61-67).

Further, this graphical flow diagram is generated as a direct consequence of using the tree view programming system, and thus, automatically.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 27-30, 33-37, 41-44, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,298,474 to Blowers et al. in view of U.S. Patent No. 5,293,429 to Pizano et al.

As per claims 27, 33, 41, and 46, Blowers et al. disclose performing a plurality of image processing functions on an image in response to a user input (see column 2, lines 47-55); recording the plurality of image processing functions, wherein the one or more image processing functions define an image processing algorithm (task sequence generation; see column 8, line 61 through column 9, line 15); receiving user input specifying a plurality of images and executing the image processing algorithm on each of said plurality of images (executing the sequence; see column 9, lines 16-25); measuring and displaying information indicating an amount of time that elapses during said executing the image processing algorithm (see, for example, Fig. 9, along with the description of “TimeTaken” in the table of column 13). Blowers et al. fail to expressly disclose determining an average amount of time required to execute the image processing algorithm. However, Pizano et al. teach determining an average amount of time required to

execute an image processing algorithm by using a plurality of input images (see column 11, lines 34-42). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to modify the method of Blowers et al. to include determining an average amount of time required to execute an image processing algorithm by using a plurality of input images as per the teachings of Pizano et al. One would be motivated to do so to be able to benchmark an image processing system and produce a meaningful estimate of system capabilities.

Blowers et al. further disclose measuring an amount of time that elapses during said executing the image processing algorithm for each of a plurality of image processing categories (see, for example, Fig. 9, along with the description of "TimeTaken" in the table of column 13; the tasks of Blowers et al. include such categories as acquisition, control-flow, and image data manipulation); and displaying information indicating the amount of time that elapses during said executing the image processing algorithm for each of the plurality of image processing categories (see "Time Taken" for various categories illustrated in Fig. 9). Blowers et al. fail to expressly disclose determining average amounts of time. However, as described above, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to modify the method of Blowers et al. to include determining an average amount of time required to execute an image processing algorithm by using a plurality of input images as per the teachings of Pizano et al. One would be motivated to do so to be able to benchmark an image processing system and produce a meaningful estimate of system capabilities.

As per claims 28 and 42, Blowers et al. further disclose displaying information indicating a rate at which the image processing algorithm is capable of processing images, based on the amount of time that elapses during said executing the image processing algorithm (see, for example, Fig. 9, along with the description of “GetMinimumTime” in the table of column 13). Blowers et al. fail to expressly disclose basing the rate on the average execution time. However, as described above, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to modify the method of Blowers et al. to include determining an average amount of time required to execute an image processing algorithm by using a plurality of input images as per the teachings of Pizano et al. One would be motivated to do so to be able to benchmark an image processing system and produce a meaningful estimate of system capabilities.

As per claims 29 and 43, Blowers et al. further disclose determining the minimum time required for executing the image processing algorithm (see the description of “GetMinimumTime” in the table of column 13) but fail to expressly disclose displaying this information. However, as admitted prior art, it has been known to include within benchmark results, in addition to empirical results for a particular execution, minimum/maximum results to establish comparative statistics for a particular result. Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to further modify the method of *Blowers et al.* to include displaying the minimum time required to execute the image processing algorithm. One would be motivated to do so to provide the user with additional, readily-available information to provide a more complete benchmark of the developed program.

As per claims 30 and 44, Blowers et al. further disclose displaying time information corresponding to each execution iteration in a structure display (see, for example, the rolling results window in Fig. 9).

As per claim 36, Blowers et al. further disclose determining memory requirements for the image processing functions (see, for example, the description of “GetMemorySize” in the table of column 13) but fail to expressly disclose displaying this information. However, as admitted prior art, it has been known to provide a display of memory usage statistics as part of a performance monitoring system. Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to further modify the method of *Blowers et al.* to include displaying memory requirements for the image processing functions. One would be motivated to do so to provide useful resource information and indicate resource bottlenecks.

As per claim 37, Blowers et al. further disclose generating a graphical data flow diagram that implements the image processing algorithm (see, for example, Fig. 6 and column 8, lines 61-67). Therefore, for reasons stated above, such a claim also would have been obvious.

6. Claims 32 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blowers et al. in view of Pizano et al. as applied to claim 27 above, and further in view of “Solaris User’s Guide,” 1995, Sun Microsystems, Inc. (hereinafter *SUG*).

As per claims 32 and 45 Blowers et al. in combination with Pizano et al. suggest such a method (see disclosure and teachings applied above to claims 27 and 41) but fail to expressly disclose displaying a clock icon, which visually indicates the time data. However, *SUG* teaches

Art Unit: 2122

a Performance Meter window with a dial display for monitoring aspects of system performance (see pages 323-330). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to further modify the method of Blowers et al. to include such a display for visually indicating the time data. One would be motivated to do so enhance the aesthetic qualities of a performance display.

Allowable Subject Matter

7. Claims 47-59 are allowed. Applicant's persuasive arguments, see p. 12, line 9, through p. 14, line 7, filed 23 November 2004, are considered sufficient reasons for allowance of these claims.

8. Claims 38-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric B. Kiss whose telephone number is (571) 272-3699. The Examiner can normally be reached on Tue. - Fri., 7:00 am - 4:30 pm. The Examiner can also be reached on alternate Mondays.

Art Unit: 2122

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam, can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EBK/~~EBK~~
December 22, 2004


TUAN DAM
SUPERVISORY PATENT EXAMINER